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A BOBIT PUBLICATION

DEC/JAN 1988

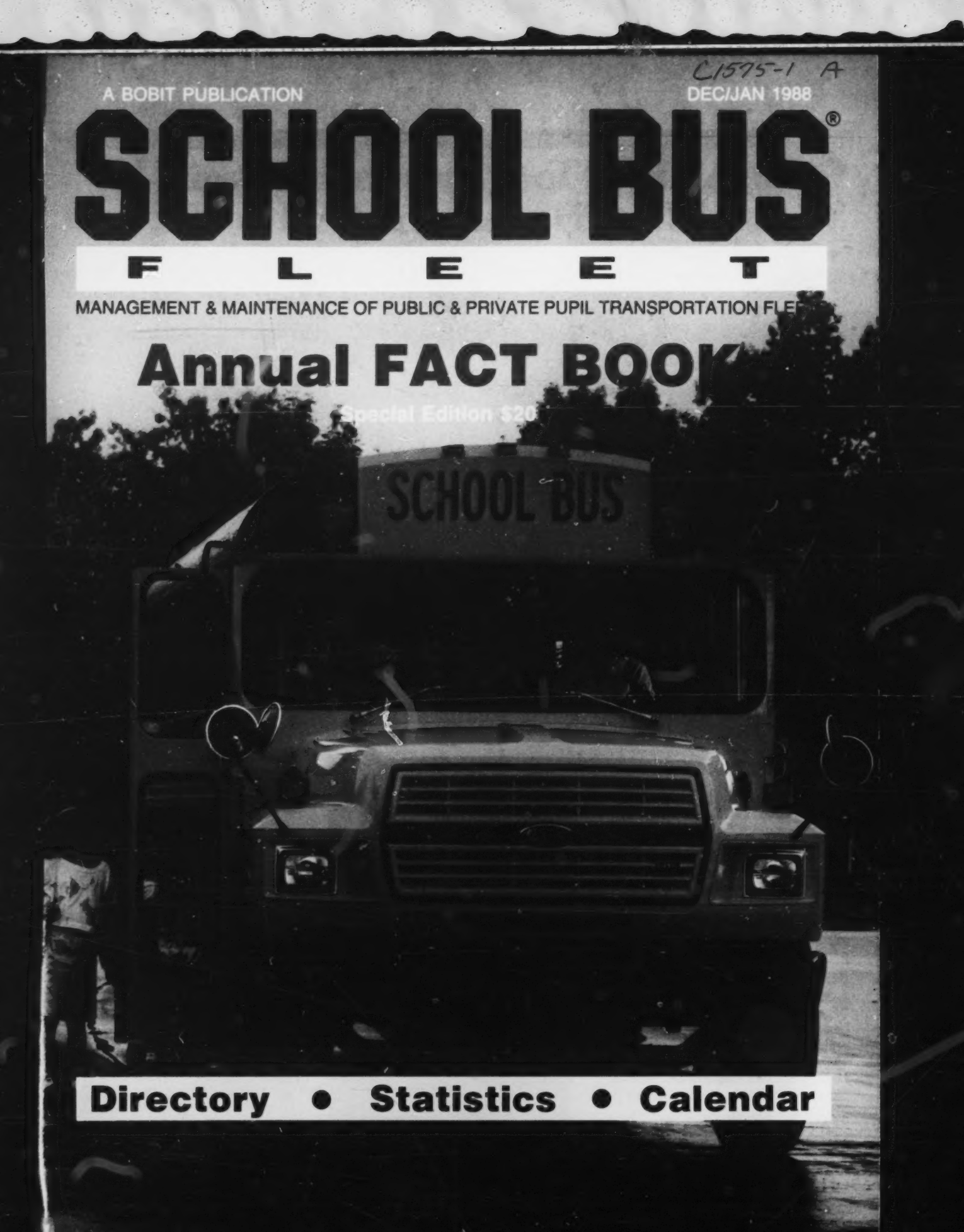
SCHOOL BUS®

F L E E T

MANAGEMENT & MAINTENANCE OF PUBLIC & PRIVATE PUPIL TRANSPORTATION FLE

Annual FACT BOOK

Special Edition $20



Directory • Statistics • Calendar

A BOBIT PUBLICATION VOL. 32 NO. 6

BOBIT PUBLISHING

SCHOOL BUS FLEET

MANAGEMENT & MAINTENANCE OF PUBLIC & PRIVATE PUPIL TRANSPORTATION FLEETS

December / January '88

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Editor and Publisher
William Paul

Managing Editor
Jason Knott

Associate Editor
Catherine G. Bruhn

Advertising Coordinator & Classified Ad Manager
Christine Nicassio

General Manager: **Monica Chambers;** *Graphics Manager:* **Lynda Young;** *Assistant Graphics Manager:* **Thomas J. Inouye;** *Graphics:* **Landis McIntire, Donna Klungle, Alise Orr, Ellen Reese, Steven Stein;** *Circulation Manager:* **Mirza Ramirez;** *Circulation Director:* **Kenya Sagy;** *Reader Service Manager:* **Phyllis Meyer**

District Advertising Managers:

Great Lakes
Robert Brown
2300 Academy Rd.
Holly, MI 48442
(313) 634-8700

Eastern
Frank DiGiacomo
49 S. Maple Ave.
Marlton, NJ 08053
(609) 596-0999

Midwest
Earl Gray
2015 S. Arlington Heights Rd.
Suite 116C
Arlington Heights, IL 60005
(312) 437-8050

Western
Maurice Sutton
2512 Artesia Boulevard
Redondo Beach, CA 90278
(213) 376-8788

Chairman and Chief Executive Officer
Edward J. Bobit

President
Ty F. Bobit

SCHOOL BUS FLEET
Business & Editorial Offices
2512 Artesia Boulevard
Redondo Beach, CA 90278
(213) 376-8788 TELEX: 662272

Member BPA NSTA NAPT ABP

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Statistics

School Transportation 1985-1986

State	Pupils Transported at Public Expense	Bus Ownership						Total Number of Buses	Total Miles of Service	Transportation Expenditures ($) Including Capital Outlay
		District			Contractor					
		Type I	Type II	Total	Type I	Type II	Total			
Alabama	435,197	634	183	6,617	0	0	0	6,617	53,815,195	$ 79,448,659
Alaska	46,420	110	5	115	467	88	555	670	5,859,452	23,131,279
Arizona[h]	205,251	370	3,085	3,455	67	0	67	3,522	32,961,729	50,189,410
Arkansas	273,305	4,075	158	4,233	N/A	N/A	N/A	4,233	38,207,673	52,478,305
California	908,697	10,969	2,586	13,555	3,447	3,314	6,761	20,316	277,969,108	560,006,004
Colorado	226,219	3,594	294	3,888	274	22	296	4,184	43,282,216	64,356,182
Connecticut	314,024	256	29	285	3,695	862	4,557	4,842	c	102,383,740
Delaware	81,557	328	29	357	867	40	907	1,264	16,021,598	24,757,209
Florida	748,920	7,735	292	8,027	625	0	625	8,652	138,455,812	206,062,305
Georgia	836,117	N/A	N/A	N/A	N/A	N/A	N/A	10,028	90,249,840	136,746,382
Hawaii	33,900	14	1	15	496	244	740	755	7,521,470	16,733,000
Idaho	122,000	1,212	132	1,344	596	64	660	2,004	19,918,237	26,158,898 d
Illinois[h]	900,000	N/A	N/A	N/A	N/A	N/A	N/A	16,433	N/A	173,069,944
Indiana	663,273	6,163	N/A	6,163	2,332	N/A	2,332	8,495	58,436,175	170,814,406
Iowa	243,914	5,834	771	6,605	201	15	216	6,821	62,268,808	59,294,212
Kansas	163,812	N/A	N/A	3,883	N/A	N/A	1,261	5,144	6,580,149	51,550,057
Kentucky	416,563	6,208	276	6,484	162	10	172	6,656	72,191,000	104,442,490
Louisiana	583,237 a	3,321	124	3,445	3,841	143	3,984	7,429	65,108,194	123,779,963 e
Maine	165,654	201	1,764	1,965	57	409	466	2,431	29,436,474	40,582,952
Maryland	441,089	2,346	17	2,363	2,521	91	2,612	4,975	76,275,363	110,184,343
Massachusetts	568,305	827	223	1,050	4,740	348	5,088	6,138	57,786,525	150,652,577
Michigan	560,000	13,503	337	13,840	N/A	N/A	250	14,090	114,245,331	300,000,000
Minnesota	859,120	3,830	735	4,565	4,475	919	5,394	9,959	116,473,000	164,185,726
Mississippi	358,266	N/A	N/A	5,100	2	0	2	5,102	39,747,497	55,645,671
Missouri	459,812	9,067	788	9,855	230	20	250	10,105	111,078,360	152,355,979
Montana	58,643	641	50	691	601	50	651	1,342	16,678,152	16,274,433
Nebraska	262,081	N/A	N/A	N/A	N/A	N/A	N/A	3,422	30,527,174	33,094,914
Nevada	57,782	116	858	974	N/A	N/A	N/A	974	12,491,454	24,171,606
New Hampshire	99,206	283	28	311	1,288	343	1,631	1,942	12,466,204	26,650,547 est.
New Jersey	628,968	3,562	1,734	5,296	4,689	3,385	8,074	13,370	174,559,255	284,285,392
New Mexico	132,543	489	69	558	1,204	294	1,498	2,056	29,260,071	45,194,397
New York	2,004,920 b	11,472	3,618	15,090	N/A	N/A	N/A	15,090	200,892,872	816,279,833
North Carolina	697,733	13,002	0	13,002	0	0	0	13,002	115,665,123	113,728,863
North Dakota	47,249	1,025	145	1,170	375	53	428	1,598	25,516,272	24,343,508
Ohio	1,219,775	14,368	210	14,578	573	50	623	15,201	158,358,140	268,958,350
Oklahoma	299,956	6,174	466	6,640	N/A	N/A	N/A	6,640	58,245,092	75,302,127
Oregon	233,828	2,672	337	3,009	1,428	119	1,547	4,556	43,170,484	66,803,819
Pennsylvania	1,345,002	N/A	N/A	N/A	N/A	N/A	N/A	19,345	243,252,788	390,529,571 h
Rhode Island[h]	83,086	N/A	N/A	N/A	N/A	N/A	N/A	887	N/A	N/A
South Carolina	444,984	5,967	26	5,993	22	271	293	6,286	65,900,028	54,339,659
South Dakota	46,569	700	188	888	300	173	473	1,361	18,555,388	18,643,144
Tennessee	561,840	4,780	138	4,918	1,304	168	1,472	6,390	75,364,841	78,041,530
Texas	1,020,907	21,857	1,744	23,601	487	19	506	24,107	224,749,001	414,317,439
Utah	145,887	1,354	64	1,418	75	1	76	1,494	18,434,070	24,511,437
Vermont[h]	71,567	567	50	1,117	477	126	603	1,846	11,531,429	16,657,688
Virginia	725,856	8,648	394	9,042	270	0	270	9,312	83,036,928	139,890,514
Washington	346,254	5,037	285	5,322	645	153	798	6,120	66,488,502	131,612,344 f
Washington DC	7,000	N/A	N/A	N/A	N/A	N/A	N/A	151	2,000,000	N/A
West Virginia	283,183	N/A	N/A	2,994	N/A	N/A	61	3,055	39,181,919	79,420,438 g
Wisconsin	462,033	N/A	N/A	N/A	N/A	N/A	N/A	6,829	73,508,025	115,781,382
Wyoming	43,517	1,222	302	1,524	25	15	40	1,564	14,941,484	27,367,167
TOTAL	**21,945,021**	**184,533**	**22,535**	**225,345**	**42,858**	**11,809**	**56,239**	**338,854**	**3,348,663,903**	**6,265,209,795**

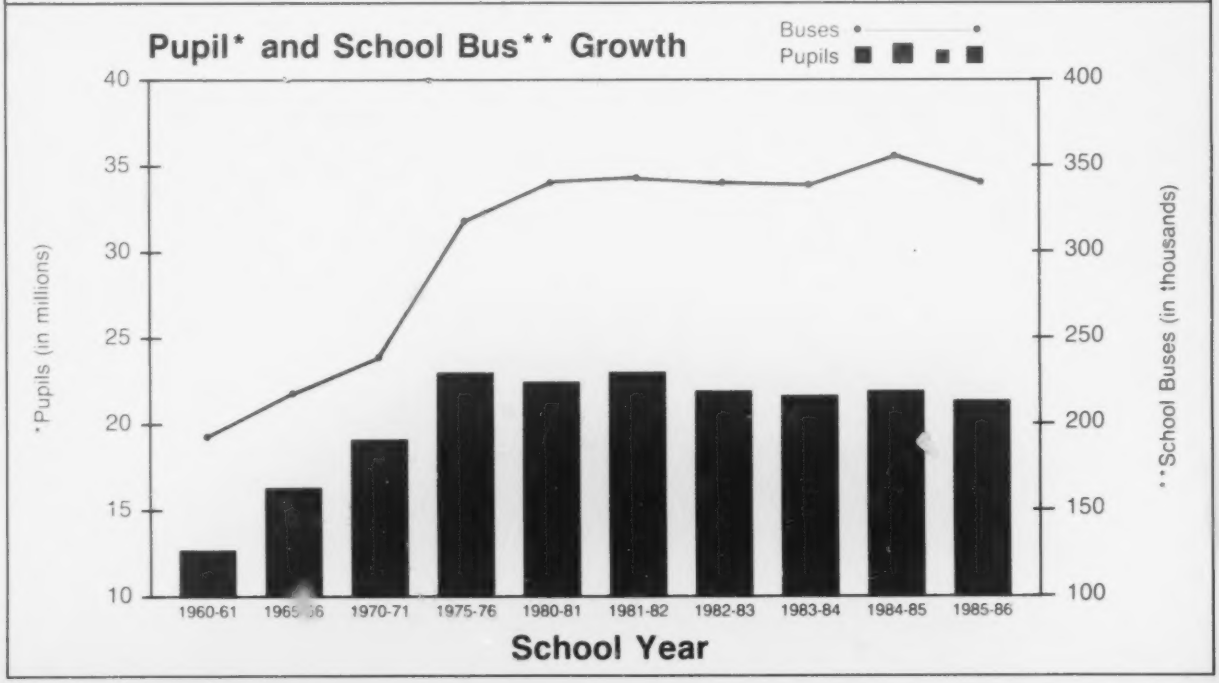
Prepared by the National Association of State Directors of Pupil Transportation Services and Bobit Publishing Research Department.

a) Includes 41,319 non-public pupils transported at public expense. b) Includes public service transportation. c) Does not tabulate mileage at state. d) Includes special contracts of $263,875. e) State — $107,526,203 Local — $16,253,760 f) Includes expenditures for 11,447 students transported on transit buses. g) Does not include capital outlay. h) State director did not provide figures before deadline. Previous year's data shown. N/A — Information not available.

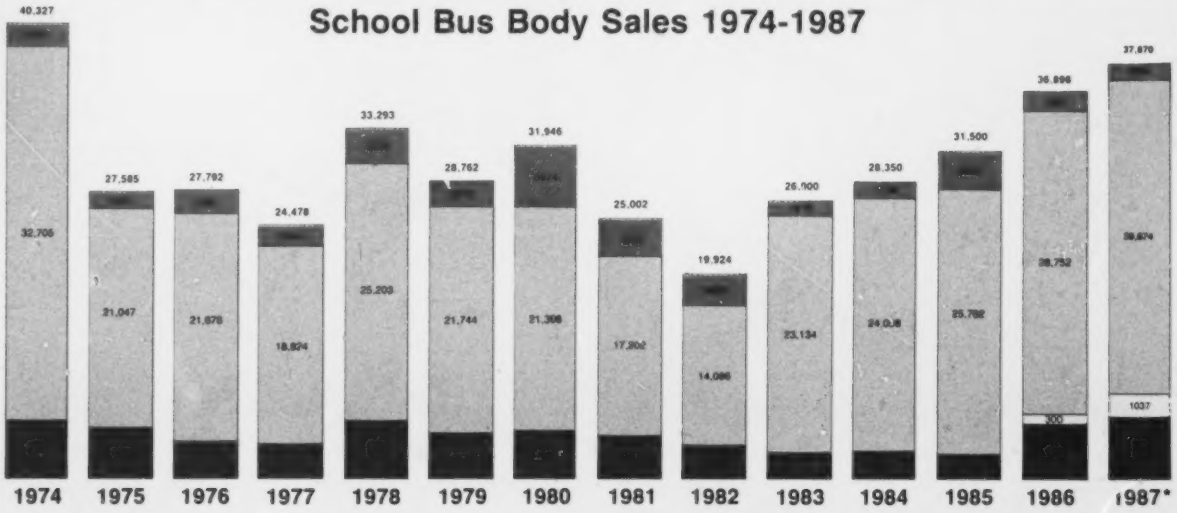
Growth of School Transportation In The United States

	Year	Number of Pupils Transported	Number of Vehicles Used	Pupils Per Vehicle	Expenditure*	Expenditure Per Pupil
	1985-86	21,945,021	338,854	64.8	$6,285,209,795	$286.40
	1984-85	23,378,605	352,434	66.3	5,750,535,560	245.97
	1983-84	21,821,947	326,392	66.9	4,724,722,010	216.51
	1982-82	20,952,506	332,453	63.0	3,565,046,073	170.14
	1981-82	22,836,272	335,160	68.1	4,821,783,550	211.14
	1980-81	22,598,975	334,461	67.6	4,125,443,607	182.50
	1979-80	22,578,280	329,808	68.5	3,894,893,829	172.50
	1978-79	22,882,191	323,333	70.8	3,341,035,199	146.01
	1977-78	21,923,780	315,489	69.5	2,880,513,030	131.39
	1976-77	23,156,006	298,173	77.7	2,666,446,831	115.15
	1975-76	22,757,316	312,030	72.9	2,285,840,977	100.44
	1974-75	22,398,556	282,834	79.2	2,000,991,592	89.33
	1973-74	21,169,633	271,552	77.9	1,537,148,313	72.61
National Association	1972-73	20,791,737	262,579	79.2	1,407,472,462	67.62
of State Directors of	1971-72	20,047,589	257,804	77.8	1,324,740,407	66.02
Pupil Transportation	1970-71	19,191,483	245,608	78.1	1,178,910,190	61.82
Services	1969-70	18,752,735	239,973	78.1	966,135,767	51.51
	1968-69	18,467,944	238,102	77.6	901,353,107	48,80
National	1967-68	17,271,718	230,578	74.9	822,595,699	47.62
Education	1966-67	16,684,922	221,722	75.3	763,600,617	45.76
Association	1965-66	16,423,396	210,692	77.9	696,325,421	42.40
	1964-65	15,413,000	206,000	74.8	642,627,000	41.69
	1963-64	15,559,524	200,116	77.7	612,310,333	39.35
	1962-63	14,247,753	195,397	72.9	578,017,634	40.57
U.S. Office	1961-62	13,687,547	191,160	71.6	540,168,114	39.46
Of Education	1960-61	13,106,779	185,869	70.5	505,754,515	38.59

*Expenditures include equipment and tools, salaries, maintenance and fixed charges, such as licenses, drivers' physical examinations, insurance, etc.



School Bus Body Sales 1974-1987



Type A, Type B } Handicap/special purpose (formerly Type II)

Type C — Conventional 24-76 pass. (formerly Type I)

Type D — Transit style 78 pass. + (formerly Type I)

*Figures for the 1987 production of school buses were accumulated six weeks prior to the end of the 1987 calender year and thus include estimates for December's production. However the margin of error is minuscule as manufacturers are able to accurately project production rates for two or more months. Readers should also bear in mind that no single industry-wide agency tabulates school bus totals as occurs in the automotive and trucking industries; these data are gathered by the editor of *School Bus Fleet* directly from manufacturers, and are presented in aggregate form to protect proprietary company information. Finally, the federal government through its various motor vehicle standards and regulations continues to utilize the Type I—Type II nomenclature to describe school bus types while the school bus industry utilizes the Type A, B, C and D designations.

Source: Bobit Publishing Co. Research

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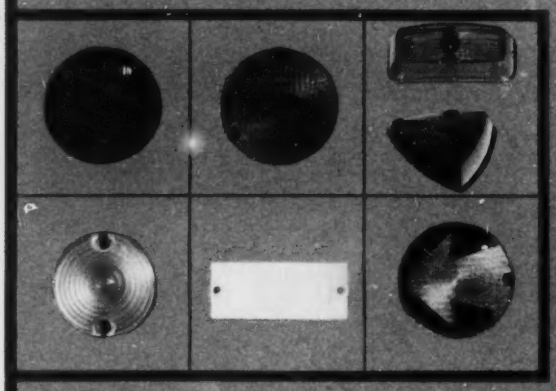

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Fax: 614/443-9217
614/445-8291

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State School Bus Purchases

In six states school buses are purchased directly by the state, with a committee comprised of the state director of pupil transportation and other educational or transportational experts developing the specifications for the vehicles. State officials compile the number of buses that districts (and sometimes contractors) require, and then solicit bids from bus body and from chassis manufacturers.

This method of procuring school buses is unlike that in most states, through their reimbursement formula, reimburse school districts which handle the procurements. Of the six states listed below, five purchase once a year while the sixth (Texas) purchases monthly. The data for four of the states is presented by school year while Kentucky and Texas purchase by calendar year. The figures represent an aggregation of all types of school buses.

State	1981	1982	1983	1984	1985	1986	1987
Florida	757	734	897	937	1,065	1,166	952
Kentucky	670	566	632	604	632	579	650
North Carolina	610	953	585	759	785	1,202	1,200
South Carolina	506	285	219	368	718	409	1,000
Texas	*2,000	*2,000	*2,000	*2,000	*2,000	*2,000	1,950
West Virginia	263	272	324	349	347	328	342
Total	**4,806**	**4,810**	**4,657**	**5,017**	**5,547**	**5,684**	**6,094**

*approximations

Do you need a product?

The School Bus Fleet Action Card in this issue is good for a full 12 months.

Use it for quick reply!

Bobit Publishing Co.
2512 Artesia Blvd.
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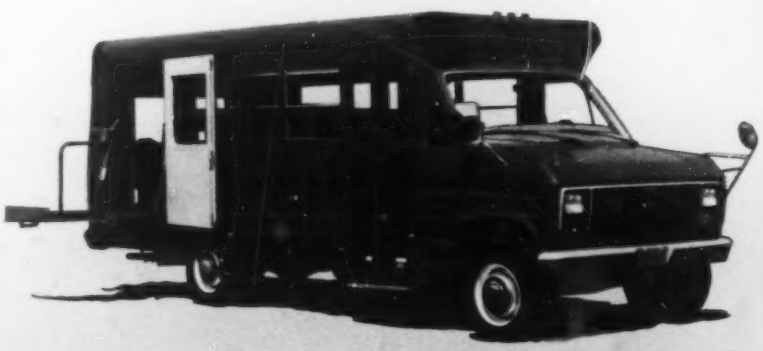

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School Bus Accidents By States 1985-86

State	Total Vehicles	Annual Bus Mileage (000)	Pupils Transp. Daily	Type of School Bus Accident				Prop. Damage Only Acc.	Persons Injured		(c) Fatalities 1985-86
				(a) Total	Other Veh.	Non-Coll.	Fixed Obj.		Total	Pupils	
Alabama	7,048	54,000	435,000	286	256	3	19	276	47	39	2
Alaska	650	7,200	42,000	76	64	0	10	67	N/A	N/A	1
Arizona[d]	3,766	32,961	205,251	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2
Arkansas	4,233	37,600	266,452	204	179	0	8	147	141	N/A	0
California	15,088	274,634	908,698	2,137	1,465	95	159	1,714	734	380	1
Colorado	5,179	43,253	226,219	308	286	2	11	239	89	54	1
Connecticut	4,557	e	314,024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Delaware	1,274	16,022	81,557	112	87	1	7	85	67	57	0
Dist. of Col.	151	2,000	7,000	62	61	0	1	62	7	4	0
Florida	8,620	138,980	748,901	1,107	797	45	98	417	577	511	1
Georgia	11,028	90,250	818,884	956	N/A	N/A	N/A	N/A	136	82	0
Hawaii	769	6,782	39,607	11	9	0	0	0	11	3	0
Idaho	2,001	19,918	122,000	108	95	1	0	92	23	6	0
Illinois[d]	16,433	N/A	900,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Indiana	10,522	58,436	648,074	N/A	N/A	N/A	N/A	678	246	84	0
Iowa	6,821	62,526	246,897	571	392	19	129	506	125	59	0
Kansas	5,144	45,236	164,411	151	131	4	8	N/A	N/A	N/A	0
Kentucky	6,744	76,645	446,563	999	824	23	86	698	299	195	2
Louisiana	7,429	65,108	580,966	683	612	18	14	636	90	59	2
Maine	2,399	29,436	165,654	140	137	0	3	115	36	8	0
Maryland	4,975	76,275	441,787	1,112	998	0	103	N/A	100	43	1
Massachusetts	6,138	57,786	568,305	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6
Michigan	13,840	114,245	965,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
Minnesota	10,500	116,473	625,855	662	616	6	12	N/A	N/A	N/A	4
Mississippi	5,100	39,747	358,266	317	270	4	5	239	76	50	2
Missouri	8,955	98,534	448,035	583	492	26	35	472	273	185	0
Montana	1,321	17,016	60,106	73	65	0	6	57	16	15	0
Nebraska	3,422	30,527	56,379	126	106	10	6	45	N/A	N/A	0
Nevada	919	12,491	57,782	210	93	0	41	134	76	50	0
New Hampshire	1,942	12,466	99,206	129	114	0	7	100	51	24	1
New Jersey	13,370	174,559	628,968	548	439	44	28	261	282	177	0
New Mexico	2,056	19,525	132,543	187	161	3	16	153	66	35	1
New York	15,090	200,892	2,004,902	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3
North Carolina	13,002	115,665	705,254	1,102	887	125	70	744	567	487	1
North Dakota	1,877	25,516	47,249	6	6	0	0	6	0	0	1
Ohio	15,201	158,358	1,219,775	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Oklahoma	6,407	58,245	299,956	355	306	0	22	257	156	98	0
Oregon	4,556	43,170	233,828	358	276	2	72	337	25	10	0
Pennsylvania	19,814	243,253	1,345,002	N/A	N/A	N/A	N/A	N/A	325	109	2
Rhode Island[d]	887	N/A	83,086	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3
South Carolina	5,988	63,850	443,650	864	789	9	40	837	399	336	4
South Dakota	1,279	8,555	45,108	84	63	2	1	77	7	3	0
Tennessee	6,373	64,011	553,483	846	603	8	199	717	355	326	0
Texas	24,500	182,000	1,000,000	1,696	1,474	20	51	1,176	1,022	345	0
Utah	1,494	18,434	145,887	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
Vermont[d]	1,846	11,531	71,567	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Virginia	9,312	83,037	725,856	811	732	1	60	658	234	117	1
Washington	6,120	66,488	346,254	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
West Virginia	2,994	39,182	283,183	641	427	0	184	636	7	3	1
Wisconsin	6,829	73,508	462,033	911	703	7	115	685	464	212	0
Wyoming	1,560	14,970	43,539	41	38	1	1	32	8	0	0
TOTAL[b]	**339,257**	**3,301,296**	**21,870,002**	**[b]37,000**	**[b]31,000**	**[b]800**	**[b]3,000**	**[b]27,000**	**[b]11,500**	**[b]6,000**	**45**

Source: National Safety Council survey of state departments of education and state traffic authorities. Most reports cover 1985-1986 school year. U.S. totals are Council estimates for the calendar year 1986.

[a]Totals include additional accident types not shown separately

[b]Procedures for estimating U.S. totals were revised for the 1985 edition. U.S. totals in this edition are not comparable to estimates prior to the 1985 edition.

[c]Kansas-DOT, Loading & Unloading Survey-School year 1985-86.

[d]State director did not report figures before deadline. Data is from previous year.

[e]Does not tabulate mileage at state level.

C1575-1-A

A BOBIT PUBLICATION

APRIL/MAY 1988

SCHOOL BUS® FLEET

MANAGEMENT & MAINTENANCE OF PUBLIC & PRIVATE PUPIL TRANSPORTATION FLEETS

Dialogue with Carpenter CEO
Oils & Lubricants Reviewed

Plus: Brake Retarder Profile, Wayne/Canada Plant Opens, Promoting Executive Education

A BOBIT PUBLICATION

BOBIT PUBLISHING

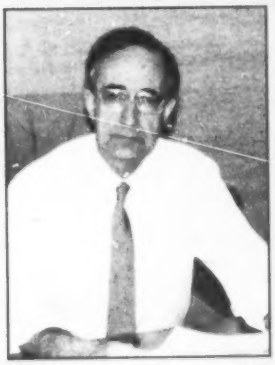
SCHOOL BUS FLEET

MANAGEMENT & MAINTENANCE OF PUBLIC & PRIVATE PUPIL TRANSPORTATION FLEETS

Vol. 33 No. 2

April/May '88

Portland 22



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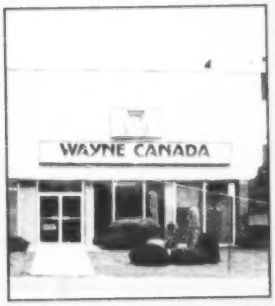

Wayne 51

On the cover: Don Hardin and Tom Molitors in front of the 83 passenger forward control Carpenter Cavalier. Photo by Stu Jones.

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EDITORIAL AWARD
JESSE H. NEAL CERTIFICATE, 1985

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Statistics:

When School Bus Fleet originally printed these school transportation figures in the December/January '88 Fact Book, there were several pieces of incomplete data, principally in the bus ownership statistics. Namely, heavily contracted states such as Illinois, New York, Pennsylvania, Rhode Island and Wisconsin did not report ownership figures. Below is a revised and updated chart listing school transportation for 1985-86.

School Transportation 1985-1986

(Revised as of March 25, 1988)

State	Pupils Transported at Public Expense	Bus Ownership						Total Number of Buses	Total Miles of Service	Transportation Expenditures ($) Including Capital Outlay
		District			Contractor					
		Type I	Type II	Total	Type I	Type II	Total			
Alabama	435,197	634	183	6,617	0	0	0	6,617	53,815,195	$ 79,448,659
Alaska	46,420	110	5	115	467	88	555	670	5,859,452	23,131,279
Arizona	205,251(h)	370	3,085	3,455	67	0	67	3,522	32,961,729	50,189,410
Arkansas	273,305	4,075	158	4,233	N/A	N/A	16	4,249	38,207,673	52,478,305
California	908,697	10,969	2,586	13,555	3,447	3,314	6,761	20,316	277,969,108	560,006,004
Colorado	226,219	3,594	294	3,888	274	22	296	4,184	43,282,216	64,356,182
Connecticut	314,024	256	29	285	3,695	862	4,557	4,842	c	102,383,740
Delaware	81,557	328	29	357	867	40	907	1,264	16,021,598	24,757,209
Florida	748,920	7,735	292	8,027	625	0	625	8,652	138,455,812	206,062,305
Georgia	836,117	N/A	N/A	10,019	N/A	N/A	9	10,028	90,249,840	136,746,382
Hawaii	33,900	14	1	15	496	244	740	755	7,521,470	16,733,000
Idaho	122,000	1,212	132	1,344	596	64	660	2,004	19,918,237	26,158,898 d
Illinois	900,000(h)	N/A	N/A	9,860	N/A	N/A	6,573	16,433	N/A	173,069,944
Indiana	663,273	6,163	N/A	6,163	2,332	N/A	2,332	8,495	58,436,175	170,814,406
Iowa	243,914	5,834	771	6,605	201	15	216	6,821	62,268,808	59,294,212
Kansas	163,812	N/A	N/A	3,883	N/A	N/A	1,261	5,144	6,580,149	51,550,057
Kentucky	416,563	6,208	276	6,484	162	10	172	6,656	72,191,000	104,442,490
Louisiana	583,237 a	3,321	124	3,445	3,841	143	3,984	7,429	65,108,194	123,779,963 e
Maine	165,654	201	1,764	1,965	57	409	466	2,431	29,436,474	40,582,952
Maryland	441,089	2,346	17	2,363	2,521	91	2,612	4,975	76,275,363	110,184,343
Massachusetts	568,305	827	223	1,050	4,740	348	5,088	6,138	57,786,525	150,652,577
Michigan	560,000	13,503	337	13,840	N/A	N/A	250	14,090	114,245,331	300,000,000
Minnesota	859,120	3,830	735	4,565	4,475	919	5,394	9,959	116,473,000	164,185,726
Mississippi	358,266	N/A	N/A	5,100	2	0	2	5,102	39,747,497	55,645,671
Missouri	459,812	5,560	550	6,110	3,636	359	3,995	10,105	111,078,360	152,355,979
Montana	58,643	641	50	691	601	50	651	1,342	16,678,152	16,274,433
Nebraska	262,081	N/A	N/A	N/A	N/A	N/A	N/A	3,422	30,527,174	33,094,914
Nevada	57,782	116	858	974	0	0	0	974	12,491,454	24,171,606
New Hampshire	99,206	283	28	311	1,288	343	1,631	1,942	12,466,204	26,650,547
New Jersey	628,968	3,562	1,734	5,296	4,689	3,385	8,074	13,370	174,559,255	284,285,392
New Mexico	132,543	489	69	558	1,204	294	1,498	2,056	29,260,071	45,194,397
New York	2,004,920 b	11,472	3,618	15,090	N/A	N/A	12,000 i	27,090	200,892,872	816,279,833
North Carolina	697,733	13,002	0	13,002	0	0	0	13,002	115,665,123	113,728,863
North Dakota	47,249	1,025	145	1,170	375	53	428	1,598	25,516,272	24,343,508
Ohio	1,219,775	14,368	210	14,578	573	50	623	15,201	158,358,140	268,958,350
Oklahoma	299,956	6,174	466	6,640	N/A	N/A	N/A	6,640	58,245,092	75,302,127
Oregon	233,828	2,672	337	3,009	1,428	119	1,547	4,556	43,170,484	66,803,819
Pennsylvania	1,345,002	4,897	231	5,128	11,890	2,812	14,702	19,830	243,252,788	370,000,000
Rhode Island	83,086(h)	N/A	N/A	60	N/A	N/A	1,740	1,800	N/A	N/A
South Carolina	444,984	5,967	26	5,993	22	271	293	6,286	65,900,028	54,339,659
South Dakota	46,569	700	188	888	300	173	473	1,361	18,555,388	18,643,144
Tennessee	561,840	4,780	138	4,918	1,304	168	1,472	6,390	75,364,841	78,041,530
Texas	1,020,907	21,857	1,744	23,601	487	19	506	24,107	224,749,001	414,317,439
Utah	145,887	1,354	64	1,418	75	1	76	1,494	18,434,070	24,511,437
Vermont	71,567(h)	567	50	1,117	477	126	603	1,846	11,531,429	16,657,688
Virginia	725,856	8,648	394	9,042	270	0	270	9,312	83,036,928	139,890,514
Washington	346,254	5,037	285	5,322	645	153	798	6,120	66,488,502	131,612,344 f
Washington DC	7,000	N/A	N/A	N/A	N/A	N/A	N/A	151	2,000,000	N/A
West Virginia	283,183	2,758	303	3,061	0	66	66	3,127	39,181,919	79,420,438 g
Wisconsin	462,033	N/A	N/A	1,900	N/A	N/A	5,200	7,100	73,508,025	115,781,382
Wyoming	43,517	1,222	302	1,524	25	15	40	1,564	14,941,484	27,367,167
TOTAL	**21,945,021**	**188,681**	**22,600**	**248,634**	**58,154**	**15,026**	**100,229**	**352,557**	**3,348,683,903**	**$6,264,680,224**

Prepared by the National Association of State Directors of Pupil Transportation Services and Bobit Publishing Research Department.

a) Includes 41,319 non-public pupils transported at public expense. b) Includes public service transportation. c) Does not tabulate mileage at state. d) Includes special contracts of $263,875. e) State — $107,526,203 Local — $16,253,760 f) Includes expenditures for 11,447 students transported on transit buses. g) Does not include capital outlay. h) Previous year's data shown. i) Estimates by NYDOT range from 45% to 55% of all school buses are contractor owned N/A — Designates that the information is not available, tabulated nor collected.

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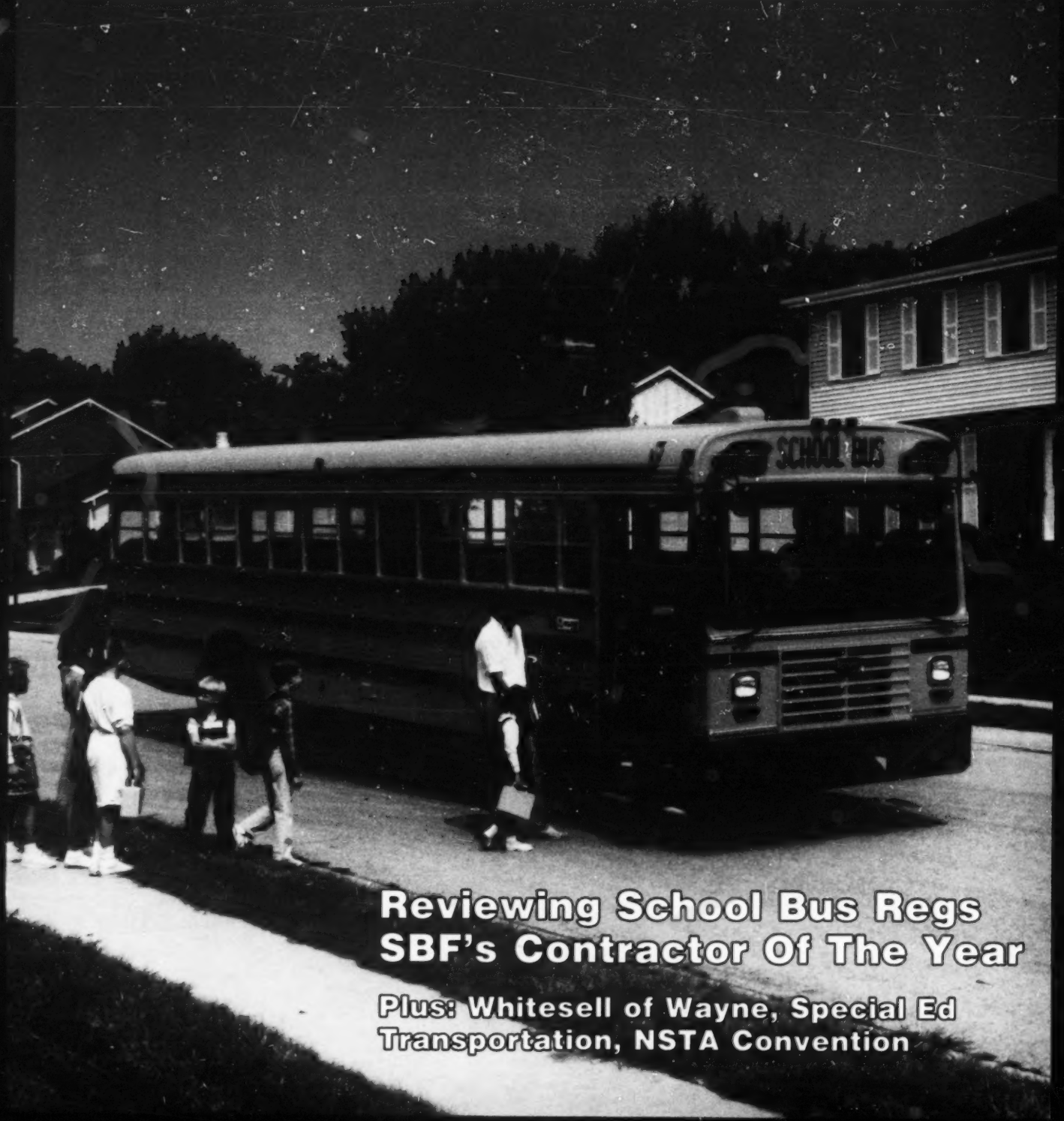
AUGUST / SEPTEMBER 1988

SCHOOL BUS FLEET

MANAGEMENT & MAINTENANCE OF PUBLIC & PRIVATE PUPIL TRANSPORTATION FLEETS



Reviewing School Bus Regs
SBF's Contractor Of The Year

Plus: Whitesell of Wayne, Special Ed Transportation, NSTA Convention

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SCHOOL BUS FLEET

MANAGEMENT & MAINTENANCE OF PUBLIC & PRIVATE PUPIL TRANSPORTATION FLEETS

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EDITORIAL AWARD
JESSE H. NEAL CERTIFICATE, 1985

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Industry News

School Districts Nationwide

State	Total	State	Total
Alabama	128	Montana	569
Alaska	53	Nebraska	1,014
Arizona	220	Nevada	17
Arkansas	371	New Hampshire	169
California	1,033	New Jersey	607
Colorado	181	New Mexico	89
Connecticut	165	New York	722
Delaware	19	North Carolina	143
District of Columbia	1	North Dakota	327
Florida	67	Ohio	615
Georgia	187	Oklahoma	619
Hawaii	1	Oregon	310
Idaho	115	Pennsylvania	500
Illinois	1,010	Rhode Island	40
Indiana	306	South Carolina	92
Iowa	441	South Dakota	195
Kansas	306	Tennessee	147
Kentucky	180	Texas	1,075
Louisiana	66	Utah	40
Maine	284	Vermont	273
Maryland	24	Virginia	139
Massachusetts	404	Washington	300
Michigan	574	West Virginia	55
Minnesota	437	Wisconsin	460
Mississippi	153	Wyoming	49
Missouri	548		

Outlying Areas

American Samoa	1	Puerto Rico	1
Guam	1	Trust Territory of the Pacific	1
Northern Marianas	1	Virgin Islands	1
United States			15,840

According to figures recently published by the Education Commission of the States, there are 15,840 school districts nationwide.

Source: Education Commission of the States

Supreme Ct. Rules On School Transportation

In a five-to-four decision, the U.S. Supreme Court ruled on June 24 that a state's decision to allow local school boards the option of charging pupils a user fee for school bus service is constitutionally permissible.

The North Dakota case, *Kadrmas vs. Dickinson Public Schools*, revolved around a rural family that sued the district for charging a $97 fee for school bus transportation. The court, with Justice O'Conner delivering the majority opinion, determined that the fee was justified, and did not discriminate against the appellants (family) on the basis of wealth, nor does the U.S. Constitution in these circumstances require government to provide free transportation to school.

The appellant in the case was Sarita Kadrmas, who was nine-years-old when the suit was originally filed in 1985. The Kadrmas family, which includes Sarita's parents and two other preschool children, lives 16 miles from her school. Mr. Kadrmas works sporadically in the North Dakota oil fields and the family's annual income at the time of the trial was at or near the officially defined poverty level. Until 1985, the family had paid the fee for busing Sarita to school. Having fallen behind on these and other bills, however, the family refused to sign a contract obligating them to pay the fee for the 1985 school year.

Subsequently, the school bus no longer stopped for Sarita and the family arranged to transport her privately to school. The costs they incurred that year for the transportation were more than $1,000. In that same year, the family filed suit seeking to prevent the school district from collecting fees for bus service.

The court found that the fee did not violate the Equal Protection Clause, and did not "promote the creation and perpetuation of a subclass of illiterates within our boundaries," as was the contention of the appellants. The fees collected by the Dickinson School District amount to only 11 percent of the cost of providing bus service.

In a dissenting opinion, Justice Marshall wrote, "Today, the Court continues the retreat from the promise of equal educational opportunity by holding that a school district's refusal to allow an indigent child who lives 16 miles from the nearest school to use a school bus service without paying a fee does not violate the 14th Amendment's Equal Protection Clause."

Carrollton Families Given Compensation

Ford Motor Co. and Sheller-Globe Corp. have monetarily compensated 64 of the 67 families who have relatives involved in the fiery church bus crash in Carrollton, Ky., that killed 27 people and injured 30 others. Meanwhile, a Washington lawyer has filed suits seeking damages on behalf of one of the remaining families against the two companies.

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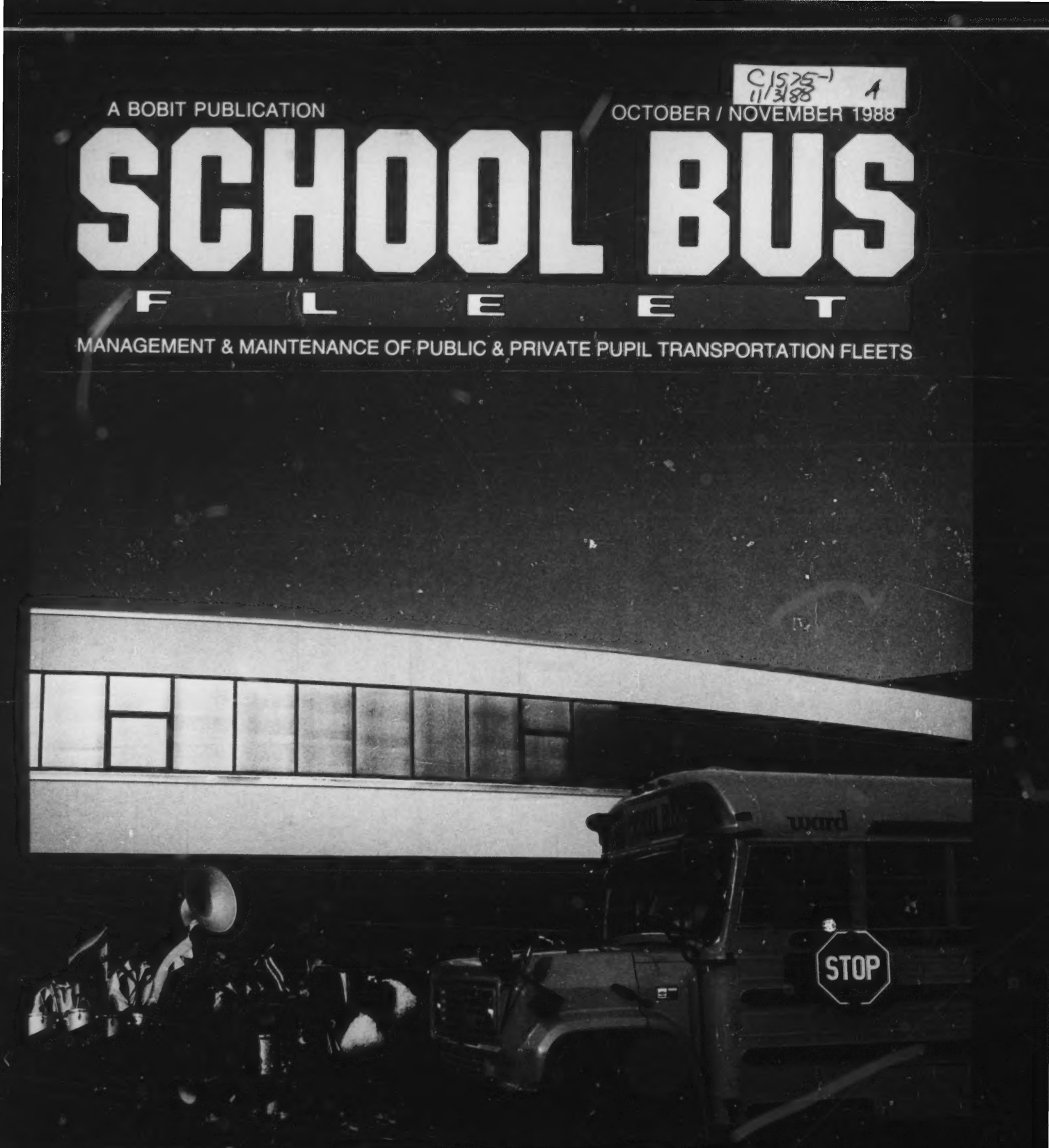

SBF's Largest Fleet Survey
Safety & Statistics: Is The Data Flawed?

Plus: AmTran Profile, Misplaced Children Survey, Automatic Transmission Trends

A BOBIT PUBLICATION

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SCHOOL BUS FLEET

MANAGEMENT & MAINTENANCE OF PUBLIC & PRIVATE PUPIL TRANSPORTATION FLEETS

Vol. 34 No. 5

October / November 1988

Statistics *22*

RANK	SCHOOL DISTRICT FLEET	NO. OF BUSES
1	New York City School District, New York, N.Y.	7,930
2	Chicago Public Schools, Chicago, Ill.	2,624
3	Los Angeles Unified School District, Los Angeles, Calif.	1,410
4	Milwaukee Public Schools, Milwaukee, Wis.	1,25
5	Fairfax County School District, Alexandria, Va.	
6	Dallas County Schools, Dallas, Texas	
7	Prince George's County, Upper Marlboro, Md.	

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On the cover: The Ward Volunteer built by American Transportation Corp. Photo by Bill Ward.

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Accident Statistics: On Quicksand Or Bedrock?

Unless you're prepared to challenge a fundamental belief, don't read this article. For this is the story behind school bus accident statistics.

By Bill Paul and Jason Knott

We've all heard it, we've all said it: school buses are the safest form of transportation available. This belief in the fundamental safety of school buses undergirds much of what pupil transportation is all about. Indeed, it provides the philosophical underpinning for both the manufacture and operation of buses for pupil transportation.

As we'll see, however, the safety and accident data about pupil transportation is flawed. This is not to suggest that the data is wrong, or necessarily inaccurate, just that it has some shortcomings. Namely, the statistics that are tabulated are inconsistent with one another, are tabulated in different forms, and are tracked for different periods of time. The problem is so acute that the National Safety Council (NSC) declares, "Interpretation of school bus accident data is complicated by the many variations between state operations, by lack of standard definitions of terms, and by lack of comparable reporting by states."

The May 31, 1985 collision between a school bus and a tractor-trailer rig in Snow Hill, N.C., is an example of the inconsistencies of school bus accident reporting. The six passengers who died were listed in figures tabulated by the National Safety Council and the Fatal Accident Reporting System, but not listed by the Kansas DOT.

Sources

The pupil transportation industry's convictions about safety are based principally on two sources:

- The NSC in its annual publication "Accident Facts" tracks the safety performance in a variety of fields, including pupil transportation.
- The Kansas Department of Transportation (K-DOT) conducts its "School Bus Loading & Unloading Survey" which reports fatalities in the "danger zone," the area outside the immediate vicinity of a school bus.

A third accident database that reports all types of highway fatalities, including school bus fatalities, is the Fatal Accident Reporting System (FARS), published by the U.S. Department of Transportation/National Highway Traffic Safety Administration. Unfortunately, FARS is not as well known, or relied on, in pupil transportation circles as are the NSC and K-DOT studies.

A fourth database is formed by the year-end reports individual state directors of pupil transportation may (or may not) publish about school bus accidents in their state. In fact, according to Ron Kinney, president of the State Directors Association, no one has ever tabulated how many states actually do so. The information is frequently collected using NSC reporting forms, though not necessarily so. Further, due to varying practices, procedures and legal requirements in the states, these data are far from standardized. Typically, year-end reports are utilized by interested parties in the states, including the legislature.

National Safety Council

According to NSC's 1986 chart titled "Types of Motor Vehicles Involved in Accidents," of the 12 categories of motor vehicles involved in occupant fatalities, a mere 0.2 percent (as in two-tenths of one percent) were school buses. This is a comforting statistic, and forms the basis of the belief that pupil transportation is the safest form of ground transportation available.

Sources For School Bus Accident Data

	*Reporting Base (1986)	Reporting Period	Injury Type Reported	Sources	Methodology	*Fatalities Reported (1986)
National Safety Council 1) Motor Vehicle Types	6 states	Calendar year	Occupant fatalities only	Survey form and phone calls	Projections	20 (est.)
National Safety Council 2) School bus accidents by state	40 states	Calendar year and school year	Many injuries and fatalities in school bus related accidents	Survey form and phone calls	Actual recorded data by state; national totals are estimates	130 (est.)
Kansas Dept. of Transportation	47 states	School year	Student fatalities in loading/unloading zone only	Survey form and phone calls	Actual recorded data	42
Fatal Accident Reporting System	50 states	Calendar year	All fatalities on public roads including school bus related fatalities	Police reports	Actual recorded data	124
Uniform Accident Reporting Form	7 states	School year	Injuries and fatalities in school bus related accidents	Survey form	Actual recorded data	N/A

This chart depicts the inconsistencies among the various sources responsible for school bus accident data collection.

*(Reporting base and fatality figures represented for 1986. Fatality figures overlap between school year and calendar year).

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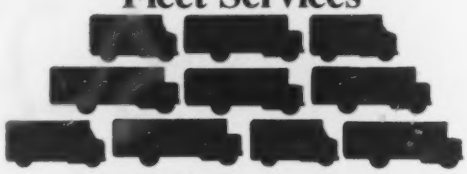

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Unquestionably, this figure compares favorably with the accident rate for other types of motor vehicles. For example, 62.4 percent of all occupant fatal accidents involved passengers cars, 26.4 percent trucks, 7.4 percent motorcycles, and 0.3 percent commercial buses.

Bear in mind, however, that the occupant fatality figure of 0.2 percent for school buses is based on data provided by *only six state traffic authorities*! Moreover, the basis for NSC's information varies from year to year — having ranged as high as 19 states providing data in 1982. The NSC cautions that some of its "percentage figures are based on numbers of vehicles and do not reflect miles traveled or places of travel, both of which affect accident experience." Indeed, many of the NSC's national accident figures are estimates.

In another chart titled "School Bus Accidents By State," the NSC reports the type of accident, property damage and injuries, though it does not include school bus accidents involving pedestrians, bicycles, and trains. Unlike the limited database from which the vehicle occupant fatality projections are made, data for this chart is based on information supplied by 40 states. The national totals in this chart, however, *are estimates*.

The NSC's school bus data is gathered by sending out an "Annual School Transportation Accident Report Form" to the state directors of pupil transportation. The accuracy of the methodology is dependent on receiving a high percentage of responses from the states. Discouragingly, in 1986, 15 states did not provide injury statistics to the NSC, compared to only five states in 1982.

Kansas DOT

Conducted since 1970, the K-DOT "School Bus Loading & Unloading Survey" reports the number of fatalities in the so-called "danger zone" around the school bus. It does not report fatalities which occur inside the school bus.

The survey details information such as the position of the child when killed by the school bus; the number of children killed by a passing vehicle; the light and weather conditions; the size of school bus, and the sex and age of the victim.

K-DOT also sends out a detailed questionnaire to each state director listed in the *SCHOOL BUS FLEET* Fact Book. The survey, which asks for data by the September-to-end-of-May school year, is mailed in mid-May and due for return by mid-September.

"The biggest problem is getting a response," said Wilma Crabtree of K-DOT. "Some states don't ever respond." For example, the 1986-87 school year survey, which revealed that 42 children were killed in the death zone, is based on information provided by only 47 states.

FARS

The third major database is the lesser known FARS report, which was begun in 1975 by the US-DOT and NHTSA. FARS consists of an

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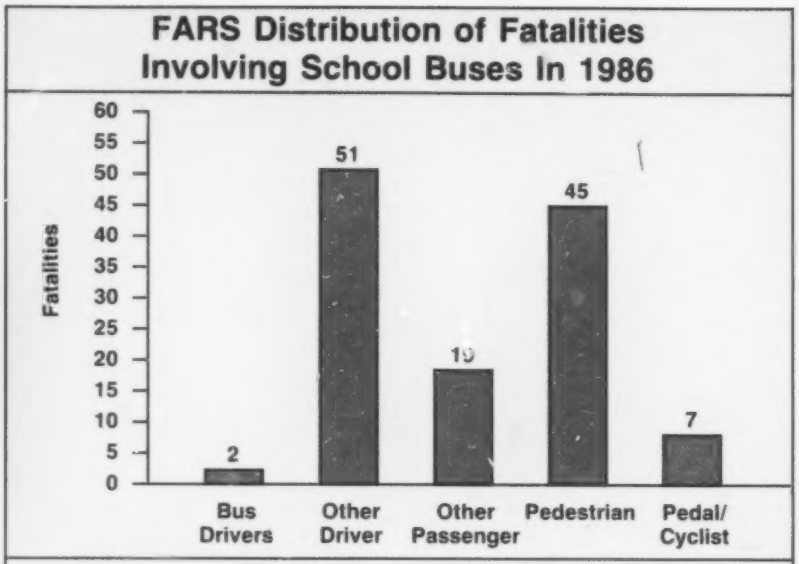

The Fatal Accident Reporting System lists 124 fatalities in school bus related accidents for calendar year 1986.

automated database derived from police reports. It focuses exclusively on fatal accidents, and picks up every accident in which a fatality occured within 30 days after the incident; however, it only reports fatalities that occur on public roads.

Safety experts consider the FARS report to be the most comprehensive accident database in the nation. Compiled by FARS analysts who are state employees, and operated and maintained by NHTSA's National Center for Statistics and Analysis, this report provides data about all highway fatalities nationwide. Data is presented by vehicle types including school buses, passenger cars and trucks.

Unlike the NSC data, FARS reports do not include estimates or projections. Nor is data collected by mailing out forms to police or safety officials. Published annually, the reports cover a 12-month calender year period.

FARS methodology defines a school bus related accident as "any fatal accident in which a vehicle functioning as a school bus is involved either directly or indirectly."

According to FARS, in 1986 "104 vehicles functioning as school buses were involved in fatal accidents and 124 people lost their lives." Of the fatalities, only two — both school bus drivers — occurred inside a school bus; 41 percent or 70 individuals were drivers or passengers of the other vehicle — most often an automobile — while 36 percent or 45 children were killed outside the bus. Additionally seven cyclists were also killed in these accidents.

The figure of 45, incidentally, contains three more fatalities than reported by K-DOT for the year. This discrepency is likely due to the varying reporting periods used by these two school bus statistical databases — calendar year versus school year.

Unreported Data

One area of accident study where there is limited data is the number of school children killed while walking to-and-from the bus stop.

The K-DOT study indicates whether the child was "going to school" or "coming home" when the danger zone fatality occurred; it does not identify children who are killed away from the danger zone while walking to-or-from the school bus stop.

Meanwhile, FARS tabulates non-occupant pedestrian fatalities, but does not relate these to the activity of the person at the time. Many in the pupil transportation industry believe that home-to-bus stop accidents should be considered school bus-related, and tabulated accordingly.

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Another area in which no accident statistics exist is among the thousands of school buses that have been sold on the unregulated secondary market to churches, the Boy Scouts, and other non-profit organizations.

The Carrollton, Ky. church bus accident last May, in which 27 people died, has brought the matter of non-regulation of church buses to national attention. As to the safety record of these former school buses now in private use, the answer is that no one knows. To the present, the constitutional guarantee of separation of church and state has prevented regulation of the buses.

The best data available was developed in 1985 by WEHCO Newspapers, a six newspaper chain based in Arkansas. According to the newspapers, from 1974 through 1985, 62 people died and 468 were injured in 19 separate crashes involving retired school buses nationwide.

All these accidents involved former school buses being utilized to transport church members, farm laborers, or scouting groups. *(Editor's note: these 19 accidents were not the only accidents involving church buses that occurred during those years, but they were the only ones identified by the newspapers.)*

This area of accident investigation is in limbo. No agency has undertaken the task of monitoring safety statistics involving private activity buses. Not even the FARS report breaks out fatalities by trip or activity.

Conflicting Parameters

Is it unrealistic to believe that all 50 states should be able to provide reliable accident information about pupil transportation? Clearly not, for NHTSA's FARS report does just that for all fatal accidents.

What complicates matters in the pupil transportation industry is that accident data comes from a variety of sources that utilize different methodologies and different calendar-year reporting periods. Some in the industry believe the root of the problem is within the school bus industry itself which has not implemented a uniform system

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to chair the writing committee that would develop the new school bus accident reporting form.

To date only seven states have adopted the form in its entirety. Meanwhile, 20 states have declared they will not adopt the UARF citing a variety of reasons including shortage of funds, the recent development of some other state accident form, unwillingness of the state police or highway patrol to change, etc. On the bright side, by the 1989-90 school year 30 states reportedly will collect school bus accident data in accordance with UARF. "Obviously we'd like to have all 50 states comply," said Donley.

Both Donley and Yonker believe that for national statistics to be gathered uniformly, strong leadership will have to come from the political arena.

The NSC is currently the principal repository for school bus accident data. Whether the NSC can ever provide the leadership Donley and Yonker envision remains to be seen, as pupil transportation is just one of many fields that the NSC tracks. It may turn out that when the UARF gains wide-spread use, the NSC will assume that role.

Bob Donley, the originator of the UARF, believes the adoption of the form will improve national accident statistic collection.

In the meantime, another possibility could be the National Highway Traffic Safety Administration in its FARS report, which already compiles the data, but seems to be unrecognized among pupil transportation officials. School bus officials should begin acknowledging FARS as an official source for fatality figures, even though they do not supply information directly into the report.

Another possible central clearing house could be the National Association of Governor's Highway Safety Representatives in Washington, D.C. This group administers federal monies for various safety programs on a statewide level. At this time, only a few of the state representatives oversee school bus safety programs.

What remains is some way to integrate the K-DOT "School Bus Loading & Unloading Survey" data with these other definitive sources.

Despite all the inconsistencies of school bus accident data collection, the industry can take consolation in the fact that it is a leader on the path toward uniformity. "Pupil transportation is the only industry in the world that has a uniform accident form," said Donley. "Other industries (such as truck and automobile) don't even try."

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SBF's Largest Public School Bus Fleets

Survey includes fleets from Florida to Alaska and reveals an increase in the number of school buses.

In the August/September 1988 issue of *SCHOOL BUS FLEET*, Michael DeGroote, CEO of Laidlaw Transportation and *SBF's* Contractor of the Year, predicted the pupil transportation industry would gradually swing from its predominate status of district-owned fleets to contractor-owned fleets. The results of the fourth annual *SCHOOL BUS FLEET* survey of the largest school bus fleets in the North America may confirm DeGroote's prediction.

This year, 42 percent of the largest 50 districts' fleets are operated by private contractors. The survey revealed 15,212 school buses are contracted out, compared to 14,497 last year.

For the third year in a row, the survey reveals an increase in the number of school buses among the 50 largest district operated fleets showing a 5.9 percent increase in the total number of vehicles with 36,346 school buses this year compared to 34,197 last year.

The combined largest 50 fleets represent approximately 10 percent of the total number of school buses nationwide. These 50 fleets transport more than 1.98 million students daily. Meanwhile, nearly 72 percent, or 26,078, of the vehicles are large Type I (conventional or transit) style school buses.

The New York City School District continues to be the largest district fleet with more than 3,000 school buses. The honor of being the fiftieth largest fleet this year goes to the Long Beach Unified School District in Long Beach, Calif., with 224 vehicles.

Fairfax County School District in Alexandria, Va., has the largest *completely* district-owned fleet with 1,227 school buses. In New York, Chicago, Los Angeles and Milwaukee, school districts have larger fleets, but they contract out part of their fleet. The fleet that owns the most school buses is the Los Angeles Unified School District which owns 1,589 vehicles, while contracting out 1,035.

California, Florida and Texas all each have four fleets among the largest 50, with Georgia, Maryland, Missouri and Louisiana represented by three fleets each.

The largest fleet new to our survey this year is the Columbus Public Schools in Columbus, Ohio, which operates 688 vehicles while transporting 45,000 children.

(Editor's note: Large school district fleets and private contractor fleets wishing to be included in next year's listing are invited to send their fleet size information to: SCHOOL BUS FLEET's Largest Fleets, 2512 Artesia Blvd., Redondo Beach, CA 90278).

50 Largest District Fleets

RANK	SCHOOL DISTRICT FLEET	TOTAL NO. OF BUSES	TYPE I (CONV./TRANSIT)	TYPE II (VAN/HANDICAP)	PUPILS PER DAY	BUSES CONTRACTED
1	New York City School District, New York, N.Y.	3,080	1,030	2,050	133,000	3,080
2	Chicago Public Schools, Chicago, Ill.	2,830	2,310	500	47,000	2,830
3	Los Angeles Unified School District, Los Angeles, Calif.	2,624	1,750	874	74,500	1,035
4	Milwaukee Public Schools, Milwaukee, Wis.	1,400	1,000	400	56,000	1,400
5	Fairfax County School District, Alexandria, Va.	1,227	1,227	0	89,200	NONE
6	Dallas County Schools, Dallas, Texas	1,150	825	325	45,000	NONE
7	Prince George's County, Upper Marlboro, Md.	946	734	212	72,600	NONE
8	School District of Philadelphia, Philadelphia, Pa.	924	780	140	33,500	406
9	Houston Independent School District, Houston, Texas	912	552	360	37,500	NONE
10	Montgomery County Schools, Rockville, Md.	859	587	272	60,000	NONE
11	Hillsborough County Schools, Tampa, Fla.	847	726	121	66,000	NONE
12	Dade County School District, Miami, Fla.	815	810	5	43,500	NONE
13	Jefferson County Public Schools, Louisville, Ky.	797	654	143	64,000	169
14	Hawaii State Schools, Honolulu, Hawaii	795	544	251	38,800	795
15	Duval County School District, Jacksonville, Fla.	732	532	200	54,000	732
16	Wake County Public School System, Raleigh, N.C.	702	683	9	40,000	NONE
17	Columbus Public Schools, Columbus, Ohio	688	647	41	45,000	137
18	Detroit Public School District, Detroit, Mich.	675	475	200	26,000	150
19	Charlotte Mecklenburg School District, Charlotte, N.C.	671	619	52	51,000	NONE
20	Minneapolis Public Schools, Minneapolis, Minn.	670	547	123	38,200	562
21	East Baton Rouge Parish School Board, Baton Rouge, La.	643	552	91	45,000	NONE
22	Boston School District, Boston, Mass.	633	302	331	38,500	80
23	DeKalb County Schools, Tucker, Ga.	627	627	0	55,000	NONE
24	Cobb County School District, Marietta, Ga.	618	470	148	50,000	NONE
25	Baltimore County School District, Baltimore, Md.	616	404	212	51,300	NONE

50 Largest District Fleets

RANK	SCHOOL DISTRICT FLEET	TOTAL NO. OF BUSES	TYPE I (CONV./TRANSIT)	TYPE II (VAN/HANDICAP)	PUPILS PER DAY	BUSES CONTRACTED
26	Missouri Voluntary Desegregation, St. Louis, Mo.	581	411	170	13,300	581
27	San Diego Unified School District, San Diego, Calif.	578	381	197	30,000	324
28	Gwinnett County Schools, Lawrenceville, Ga.	548	446	102	57,000	NONE
29	St. Louis Public Schools, St. Louis, Mo.	546	487	59	18,000	522
30	Austin Independent School District, Austin, Texas	518	303	215	21,000	NONE
31	Caddo Parish School District, Shreveport, La.	513	411	102	30,000	NONE
32	Cleveland City Schools, Cleveland, Ohio	500	400	100	43,000	NONE
33	Metro Nashville Public School System, Nashville, Tenn.	460	335	125	46,000	NONE
34	Los Angeles County Office of Education, Downey, Calif.	450	50	400	5,600	450
35	Clark County School District, Las Vegas, Nev.	440	390	50	32,000	NONE
36	Denver Public Schools, Denver, Colo.	425	275	150	23,000	NONE
37	Albuquerque Public School District, Albuquerque, N.M.	398	259	139	30,000	398
38	Jefferson Parish Public School System, Harvey, La.	386	375	11	50,300	386
39	Buffalo Board of Education, Buffalo, N.Y.	376	308	68	46,200	354
40	Portland Schools, Portland, Ore.	333	177	156	14,000	240
41	Fort Worth Independent School District, Fort Worth, Texas	332	304	28	15,000	NONE
42	Memphis City Schools, Memphis, Tenn.	331	181	150	20,000	N/A
43	Seattle Public Schools, Seattle, Wash.	325	293*	97	22,200	325
44	Special School District of, St. Louis Co., St. Louis, Mo.	293	166	127	5,700	NONE
45	Pasco District Schools, Port Richey, Fla.	291	222	69	24,000	NONE
46	Anchorage School District, Anchorage, Alaska	270	230	40	20,000	162
47	Oklahoma City Public Schools, Oklahoma City, Okla.	269	181	88	15,500	NONE
48	Jefferson County Schools, Lakewood, Colo.	267	264	3	18,000	NONE
49	Tucson Unified School District, Tucson, Ariz.	235	172	63	14,500	NONE
50	Long Beach Unified School District, Long Beach, Calif.	224	157	67	18,000	196

*Includes 65 public transit buses